

LISTING OF CLAIMS

No claims are amended herein.

1. (Previously Presented) A process for preparing a concentrated milk protein ingredient which comprises the steps of:

providing a solution having a kappa-casein containing milk protein which is an ultrafiltration retentate;

adjusting the divalent ion content of said protein solution to a predetermined level at which no substantial gel is formed after treatment with a milk clotting enzyme wherein said adjusting is achieved by cation exchange using a food grade cation exchanger to replace calcium and magnesium with sodium or potassium;

adding a food grade milk clotting enzyme under reaction conditions appropriate to convert said kappa-casein to para kappa-casein while maintaining a solution;

deactivating or removing said enzyme to terminate said conversion; and
concentrating said solution.

2. (Previously Presented) The process of claim 1, wherein other proteins are added to or are present in said milk protein solution.

3. (Original) The process of claim 2, wherein said other proteins are added to said milk protein solution prior to adjusting said divalent ion content.

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Previously Presented) The process of claim 1, wherein said food grade enzyme is rennet.

9. (Previously Presented) The process of claim 1, wherein said divalent ion content is reduced by at least 25% from that in skim milk.

10. (Previously Presented) The process of claim 1, wherein said ion content is reduced by at least 30, 40, 50, 60, 70, 80, 90 or 100% from that in skim milk.

11. (Previously Presented) The process of claim 1, wherein said kappa-cascin is converted to para kappa-casein at a pH in the range of 4.5 to 7.5 at a temperature in the range of 0 to 70°C.

12. (Original) The process of claim 11, wherein said conversion is at a temperature of 10, 20, 30, 40, 50 or 60°C.

13. (Previously Presented) The process of claim 1, wherein fat or edible oil is added to said milk protein solution.

14. (Original) The process of claim 13, wherein said fat is cream.

15. (Original) The process of claim 13, wherein said fat is milk fat.

16. (Previously Presented) The process of claim 1, wherein said milk protein is made from whole milk.

17. (Previously Presented) The process of claim 1, carried out as a batch process.

18. (Previously Presented) The process of claim 1, carried out as a continuous process.

19. (Previously Presented) The process of claim 1, carried out as a combination of a batch and a continuous process.

20. (Previously Presented) The process of claim 1, which includes the additional step of heating said concentrated solution to form a process cheese.

21. (Original) The process of claim 20, which includes the step of combining said concentrated solution with cheese making ingredients prior to or during said heating step.

22. (Previously Presented) The process of claim 1, which includes the additional step of drying said concentrated milk protein solution.

23. (Original) The process of claim 22 which includes the additional step of rehydrating said dried solution with hot water and blending to form a cheese.

24. (Original) The process of claim 23, wherein said water is heated before blending.

25. (Original) The process of claim 23, wherein said water is heated during or after blending.

26. (Previously Presented) The process of claim 23 wherein said water is heated to between 30°C and 100°C.

27. (Previously Presented) The process of claim 23 wherein said rehydrating water contains calcium.

28. (Canceled).

29. (Canceled)

30. (Canceled).

31. (Canceled)

32. (Previously Presented) The process of claim 1 which includes the preliminary step of subjecting a milk to ultrafiltration and recovering the milk protein retentate thereby formed.

33. (Canceled)

34. (Previously Presented) The process of claim 32 wherein said ultrafiltration includes diafiltration.